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20. A resist material according to claim 17, wherein a weight ratio of the at least one non-ionic surfactant having neither a fluorine substituent nor a silicon-containing substituent to the surfactant containing a fluorine substituent ranges from 0.1 to 100.

REMARKS

Claims 1-4 and 9-16 are currently pending in the Application. Claim 2 is objected to because of informalities related to Markush type claims. Claims 1-4 and 13-16 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Kawabe et al. (United States Patent No. 6,159,656). Claims 9-12 stand rejected under 35 U.S.C. § 103(a) as being obvious and unpatentable over the combination of Kawabe et al. (United States Patent No. 6,159,656) with Chen et al. (United States Patent No. 6,174,661 B1).

Claims 1, 2, and 13 are amended herein. Claims 17-20 are added by this amendment.

I. Objections to Claim 2

Claim 2 is objected to. Claim 2 is amended herein to include the proper Markush type language. Applicants respectfully request allowance of amended Claim 2 as it now stands. ✓

II. 35 U.S.C. § 102(e)

Claims 1-4 and 13-16 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Kawabe et al. Applicants traverse this rejection.

Under 35 U.S.C. § 102, "a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." M.P.E.P. § 2131 (quoting *Verdegaal Bros. v. Union Oil Co.*, 814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987)). Claim 1 of the present invention recites "a resist material comprising one or more surfactants having a fluorine substituent and between 10 and 2000 ppm of a non-ionic surfactant comprising one or more non-ionic surfactants having neither a fluorine substituent nor a silicon-containing substituent" (emphasis added). Kawabe et al. does not propose a resist material comprising between 10 and 2000 ppm of a non-ionic surfactant as recited in Claim 1. Therefore, Kawabe et al. fails to anticipate Claim 1 because Kawabe et al. does not expressly or inherently describe all of the recitations of Claim 1. See, *Verdegaal Bros. v. Union Oil Co.*, 814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir.

1987).

Kawabe et al. also fails to anticipate Claim 13 for similar reasons. Amended Claim 13 specifically recites, in part, "coating a resist material on a substrate, the resist material comprising one or more surfactants having a fluorine substituent and between 10 and 2000 ppm of a non-ionic surfactant comprising one or more non-ionic surfactants having neither a fluorine substituent nor a silicon-containing substituent" (emphasis added). Kawabe et al. does not propose coating a resist material on a substrate wherein the resist material includes between 10 and 2000 ppm of a non-ionic surfactant. Kawabe et al. fails to anticipate Claim 13 because Kawabe et al. does not expressly or inherently describe all of the recitations of Claim 13. *See, Verdegall Bros. v. Union Oil Co.*, 814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987).

Claims 2-4 depend from Claim 1 and Claims 14-16 depend from Claim 13. As dependent claims of allowable independent claims, Claims 2-4 and 14-16 are also allowable.

For at least the foregoing reasons, Applicants respectfully submit that Kawabe et al. does not anticipate Claims 1-4 and 13-16 and request that the rejection of those claims under 35 U.S.C. § 102(e) be withdrawn and the claims allowed.

III. 35 U.S.C. § 103(a)

Claims 9-12 stand rejected as being obvious under 35 U.S.C. § 103(a) based on the combination of Kawabe et al. with Chen et al. Applicants traverse this rejection.

Claims 9-12 depend directly or indirectly from Claim 1, which is non-obvious. Dependent claims of a non-obvious independent claim are also non-obvious. *See, In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988)(stating that if an independent claim is nonobvious under 35 U.S.C. § 103 then any claim depending therefrom is nonobvious); *see also*, M.P.E.P. § 2143.03. For at least this reason, Claims 9-12 are allowable over the obviousness rejection because they depend from an allowable, non-obvious independent claim.

CONCLUSION

The amendments to the claims herein, including the addition of Claims 17-20, are supported by the Specification and do not add any new matter. The concerns of the Examiner

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addressed in full, Applicants respectfully request withdrawal of the outstanding rejections and the issuance of a Notice of Allowance forthwith. The Examiner is encouraged to direct any questions regarding the foregoing to the undersigned attorney who may be reached at (919) 854-1400.

Respectfully submitted,



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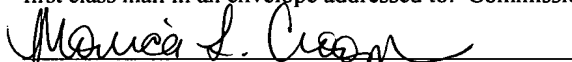


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Monica L. Croom

VERSION WITH MARKINGS TO SHOW CHANGES MADE

Please amend the claims to recite as follows:

1. (Amended) A resist material comprising one or more surfactants having a fluorine substituent and between 10 and 2000 ppm of a non-ionic surfactant comprising one or more non-ionic surfactants having neither a fluorine substituent nor a silicon-containing substituent.

2. (Amended) A resist material according to claim 1 wherein said non-ionic surfactant is one or more compounds selected from the group consisting of polyoxyalkylene alkyl ether esters, polyoxyalkylene alkyl ether, polyoxyalkylene dialkyl ether, polyoxyalkylene aralkyl alkyl ether, polyoxyalkylene aralkyl ether, polyoxyalkylene diaralkyl ether, and polyoxyalkylene laurylates.

13. (Amended) A method for forming a pattern on a substrate comprising:
coating a resist material on a substrate, the resist material comprising one or more surfactants having a fluorine substituent and between 10 and 2000 ppm of a non-ionic surfactant comprising one or more non-ionic surfactants having neither a fluorine substituent nor a silicon-containing substituent;
subjecting the substrate to heat to treat the substrate;
exposing the substrate through a photomask to radiation selected from the group consisting of high energy radiation having a wavelength of 500 nm or less, X-ray radiation, and electron beam radiation;
optionally heat treating the substrate; and
developing the substrate in a developing solution.

* * * *end* * * *